

WHAT IS CLAIMED IS:

1. A manufacturing method of a liquid jet head, comprising:

a step of forming a piezoelectric member which
5 generates a discharge pressure for discharging a liquid on a substrate;

a step of disposing a vibration plate on the piezoelectric member;

10 a step of forming a liquid flow path pattern containing a soluble resin on the vibration plate;

a step of forming a coat layer containing a resin constituting a wall of the liquid flow path on the liquid flow path pattern;

15 a step of removing the liquid flow path pattern to form the liquid flow path;

a step of removing the substrate; and

a step of patterning the piezoelectric member in accordance with the liquid flow path.

20 2. The manufacturing method of the liquid jet head according to claim 1, further comprising: a step of forming a liquid discharge port in the coat layer between the step of forming the coat layer and the step of forming the liquid flow path.

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3. The manufacturing method of the liquid jet head according to claim 1, wherein the step of

disposing the vibration plate comprises: laminating the vibration plate on the piezoelectric member or coating the piezoelectric member with a resin constituting the vibration plate.

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4. The manufacturing method of the liquid jet head according to claim 1, wherein the coat layer contains an epoxy resin which is solid at normal temperature.

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5. The manufacturing method of the liquid jet head according to claim 4, further comprising the steps of: forming the coat layer on the substrate by spin coat or roll coat.

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6. The manufacturing method of the liquid jet head according to claim 1, wherein the substrate and a layer of a resin formed on the substrate have optical transmission.

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7. A manufacturing method of a liquid jet head comprising:

25 a step of forming a piezoelectric member which generates a discharge pressure for discharging a liquid on a substrate;

a step of disposing a vibration plate on the piezoelectric member;

a step of forming a liquid flow path pattern containing a soluble resin on the vibration plate;

a step of forming a coat layer containing a resin constituting a wall of the liquid flow path on

5 the liquid flow path pattern;

a step of removing the substrate;

a step of patterning the piezoelectric member in accordance with the liquid flow path; and

a step of removing the liquid flow path pattern

10 to form the liquid flow path.

8. The manufacturing method of the liquid jet head according to claim 7, further comprising: a step of forming a liquid discharge port in the coat layer

15 between the step of forming the coat layer and the step of removing the substrate.

9. The manufacturing method of the liquid jet head according to claim 7, wherein the step of

20 disposing the vibration plate comprises: laminating the vibration plate on the piezoelectric member or coating the piezoelectric member with a resin constituting the vibration plate.

25 10. The manufacturing method of the liquid jet head according to claim 7, wherein the coat layer contains an epoxy resin which is solid at normal

temperature.

11. The manufacturing method of the liquid jet head according to claim 10, further comprising the 5 steps of: forming the coat layer on the substrate by spin coat or roll coat.

12. The manufacturing method of the liquid jet head according to claim 7, wherein the substrate and 10 a layer of a resin formed on the substrate have optical transmission.